THE BRICKBUILDER

VOLUME XX OCTOBER 1911 NUMBER 10

PUBLISHED MONTHLY BY **ROGERS & MANSON**
85 Water Street - - - Boston, Massachusetts
Entered at the Boston, Mass., Post Office as Second-Class Mail Matter, March 12, 1892.

Subscription price, mailed flat to subscribers in the United States, Insular Possessions and Cuba	$5.00 per year
Single numbers	50 cents
Subscription price, mailed flat to subscribers in Canada	$5.50 per year
To Foreign Countries in the Postal Union	$6.00 per year

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LETTERPRESS

CHURCH OF SAN CRISTOBAL,
PUEBLA, MEXICO.

Dome is covered with glazed tile forming squares of yellow and blue. The ribs are blue and the star is yellow on a blue ground.

THE BRICKBUILDER

OCTOBER, 1911

VOLUME XX. NUMBER 10.

Architects in Charge of Construction.

H. KENT DAY.

THE article by Mr. Walter B. Chambers, "Architects in Charge of Construction," published in THE BRICKBUILDER for August, gives so complete a description of the system that it seems best that anything further on the subject should assume the form of comments supplemental thereto.

It is doubtful whether the term "Trades-Contract Method" is the best for the purpose. It would be better to emphasize the *separation* of the usual general contract into many, rather than to call them "trade-contracts"; therefore the term "Separate Contract System," which is frequently if not generally used, expresses the essential idea more strongly.

One of the most important advantages in the separate contract system not mentioned by Mr. Chambers is that the architect actually *controls the selection* of the sub-contractors. No matter how many bidders he may ask in any one trade, it may be supposed that he will apply only to those who would be satisfactory to him as contractors and whose bid he would accept if lowest. Thus in advance he knows that his list of contractors, as far as can be foreseen, will be such as he would desire. In the general contract system, bids are often asked even by good well-meaning general contractors from low bidding sub-contractors, and it is seldom that the lowest general bidder presents a list which is wholly satisfactory. Should the architect wish to substitute others who do meet with his approval, the bid is necessarily advanced, perhaps beyond that of the next highest bidder, whose list in turn would probably contain objectionable names.

It is because the separate method provides, as shown, presumably only good men for the various trades that there is more direct and better control of the work, rather than on account of avoiding what Mr. Chambers calls the "Military System." While it does occur occasionally that a sub-contractor refuses to take orders or suggestions from the architect unless through the general contractor, this gives little trouble compared with the frequent necessity of accepting unsatisfactory or incompetent men as sub-contractors, often those whose habits of workmanship, no matter how willing they may be, prevent their carrying out their contracts as demanded by the specifications and by the architect. Incompetent sub-contractors are met with more frequently than disobliging ones, but by the separate contract system there is a reasonable surety of avoiding both.

Mr. Chambers mentions the saving of the general contractor's profit on the total of the sub-contracts, but the advantage to the owner through closer bidding under the separate contract system deserves fuller explanation. Under a general contractor in an operation where there are, say, twenty-five separate parts of the work, at least one hundred and twenty-five bids would be asked. Each general contractor is furnished by the architect with a set of the blue prints and a copy of the specifications. The result is that in a more or less cramped and unsuited office there are often seen a great number of men at one time (for they seldom begin to make up their estimate until the last days of the time allowed) endeavoring to learn what work they have to do or what materials to furnish, all needing the specifications and certain prints at the same time and necessarily guessing, more or less, at the cost or quantity and, naturally, not in the owner's favor.

The difference of opportunity and certainty in bidding in the separate contract system is marked. As stated by Mr. Chambers a much larger number of copies of drawings and specifications are required. Each of the, say, one hundred and twenty-five bidders receives as nearly a complete set of drawings and copy of the specifications as he may have any reason for consulting. The work of some bidders may have a relation to twelve or more parts of the work. These men must have all those parts of the specifications sent to them with whatever part, or the whole if necessary, of the blue prints. Thus the total number of prints and specifications distributed may be very large, yet there must be no economy in regard to this. Each man must be allowed ample time, from one week to ten days, to examine everything having any bearing upon his bid. This he is enabled to do at his own office or home, and with the advantages afforded him he is more likely to commence to compute soon after receiving the documents. He realizes he is in a real competition, equally fair to all, and he will proceed to obtain the best bids possible on his materials, apparatus, etc. He now has no reason for guessing, he can get his costs accurately on even the smallest items of labor or material.

Mr. Chambers gives as a reason why contractors like this system, that the payments are made direct by the owner, and explains clearly why this is an advantage, but he fails to make the point that this is a strong reason for low bidding. Many contractors state freely that they bid lower under a contract direct with the owner than they will to a general contractor. It is often stated that this difference is five per cent or more. It must be remembered that in bidding to several general contractors, they do not know which will be the lowest and they have to take the risk of becoming sub-contractors to an undesirable contractor, whereas the owner's financial responsibility is or may be known in advance and is generally better than that of the average contractor. It is not difficult, therefore, to see the advantages to the owner in this method of getting the bids under the separate contract system.

As to the various contractors under this system who would otherwise be sub-contractors, it may be freely stated that invariably they greatly prefer this method. In addition to the advantage to them that they are paid directly by the owner and that they can know in advance what his responsibility is, they are interested in the work and they come into immediate contact with the architect whom they find directly interested in their work. They are not separated from him by one who is a mere broker of their services. They realize that they are having a fair chance to do their best, and they do it. They become keen for re-employment under the same system.

As to owners, it is the experience of those architects who have adopted this method that when an owner has had even a single opportunity of observing its workings, he would not willingly go back to the general contract system. An interesting instance is where an owner who was familiar with the separate system, having occasion to have some large work done by an architect other than the one usually employed by him, insisted that the work be done by the separate system even though the architect was unfamiliar with it.

Mr. Chambers omits an important point — possibly he thought it went without saying — that the architect should have a greater commission for doing the work under this system. As the owner will make very considerable savings through direct bidding and by the saving of the general contractor's profits on sub-contracts, he will have, after paying the architect a suitable fee for the additional work and expense entailed, a substantial balance in money in his favor aside from all the advantages inherent in this method. It is not meant that the owner should pay a larger fee because he — the owner — makes substantial savings, but because of the added work and responsibility devolving upon the architect. Some of the reasons for such added work and expense may be noted:

Drawings must be more numerous and more carefully made and fuller in their demonstration of the work.

Specifications must be more accurately divided as to trades; and more complete and detailed.

The bidding in detail becomes a part of the duties of the architect.

There are many contracts to write and to have executed in place of one.

Supervision is far different, combining much usually done by the general contractor and much that he often fails to do.

Book-keeping must be separate and accurate for each account from start to finish.

Responsibility of the architect is far greater in many respects.

Payments are made monthly to many contractors instead of to one. The architect must issue a separate certificate to each contractor after careful investigation and, if necessary, correction of the claims of each.

It is more important than with work done in the usual way that the one or more superintendents should be not only capable persons but especially suited by experience and temperament for carrying on the work under separate contracts and attending to the various additional duties which are theirs under this system. It is their duty to see that the work of the various contractors is done in the proper sequence, that there are sufficient and properly skilled men furnished by each contractor at the proper times, to know in advance the condition of the work in the shops or yards and many other duties which are, under the ordinary method, those of the contractor and his assistants.

In regard to the "gaps and holes" that Mr. Chambers says have to be filled under the general contract system, most contractors figure on these and include in their bids what may be called a "contingent fund." If, however, there are no gaps or holes or only a few, the contractor gets his allowance in full and the owner is correspondingly the loser. Moreover, the theory that he will fill the gaps when he has made a contingent allowance is not borne out by the facts, for when no sub-contractor can be called upon under the specifications, the general contractor will nearly always demand an extra, as it is not known that he has allowed for gaps in his contract price. He makes such allowance to cover himself, but it is not usually used for the owner's benefit if an extra can be obtained. In the separate contract system, the greater care needed in preparing the drawings and specifications for bidding under distinct headings makes gaps and holes less likely to occur — the owner paying only what it costs to take care of them and never paying twice. Again, guessing and the consequent loss to the owner thereby is eliminated.

In conclusion it may be said that the separate contract system is not generally applicable with advantage to small operations. While it would be of advantage to the owner to adopt the system for work of any size, it is doubtful whether, with any reasonable payment, the architect can employ it without loss on buildings costing less than $75,000 to $100,000.

What has been said above about general contractors and their methods of handling contracts must not be taken as applied to all alike. There are many who do take an interest in the work other than that of a broker and who do not exact an extra wherever possible. If all were of this kind, there would be little need of the separate contract system.

Legal Hints for Architects.— Part IV.

WILLIAM L. BOWMAN, C. E., LL. B.

DURING EMPLOYMENT.

Duty to Employer. The failure of architects generally to have a formal written contract of employment has just called forth the following judicial plea: "When parties fail to reduce their contracts to writing and cannot agree upon the terms thereof, it is difficult for courts to determine with legal accuracy the liability of the contracting parties." Such failure necessarily leaves the architect's duties undefined, and as a practical matter the same might be said of most of the architects' written contracts. Those duties are threefold, namely, to his employer, to the contractor thereafter employed, and to himself. They are largely determined by the architect's contract of hiring, and by the terms of the construction contract entered into by the owner, but they also depend somewhat upon the practice of the profession as established by custom and good usage in the various localities. An architect, like any other professional man, impliedly contracts with his employer (who will for convenience hereafter often be designated as the owner) that he has the ordinary skill, knowledge, and judgment possessed by men of his profession, and that he will use this skill, care, and judgment in the interest of his employer and will act with perfect honesty. There is also an implied understanding upon the employment of an architect that the work shall be suitable and capable of being used for the purpose for which it is intended. The basic principle of the relationship between employer and architect has been concisely stated in these words: "Architecture is the art of building according to certain determined rules. The owner does not know the rules. He employs an architect, who makes the plans in accordance with them." In addition to his knowledge of the fundamental laws of nature, of materials, etc., an architect represents himself as possessed of a knowledge of the statutes, ordinances, and laws relating to buildings and to the erection of buildings in the places where the structure is to be located.

As to the amount of skill required, his undertaking implies that he possesses skill and ability, including taste, sufficient to enable him to perform the required services, at least ordinarily and reasonably well, and the mere fact that others of far greater experience or ability might have used a greater degree of these elements is not sufficient to make him responsible for failures or mistakes in matters of reasonable doubt and uncertainty. Unless there is a special contract providing therefor, an architect does not warrant the perfection of his plans, nor of the structure, nor its safety, nor that it is durable, any more than a surgeon warrants a cure or a lawyer guarantees the winning of a case. The question is whether there has been such a want of competent care and skill leading to a bad result as to amount to negligence. Thus, one who takes a contract to plan a million dollar court-house has been held by the law to a higher degree of skill than one employed to plan a country home, or, as it has been judicially expressed, the skill and care must be commensurate with the undertaking to be performed. The liability of an architect for failure to possess or apply these qualifications will be hereinafter considered under that heading.

One of the early duties of an architect is to obtain from the owner all facts necessary to enable him to prepare proper plans and specifications for the proposed building. Another duty is to submit studies, sketches, or preliminary plans for approval, which should conform to the instructions given by the owner, especially as to the estimated cost. Said sketches or preliminary plans should also comply with all laws applicable, they should not infringe the rights of any third party, and should be in accordance with all the rules of the architect's science and art. How many different sketches or studies shall be submitted upon request depends upon the contract requirement. If nothing is mentioned regarding the same, then the number depends largely upon the importance and magnitude of the proposed construction. If the architect has confirmed his employment by writing, as has been suggested should always be done, and at the same time referred to and enclosed the schedule of the American Institute of Architects, so that its terms and conditions are brought to the notice of the employer, then the number of sketches would probably be governed by said schedule. Ordinarily this is not a matter of serious import, except in cases where the employment is discontinued after such studies or preliminary plans have been prepared and submitted. Whether recovery will be permitted for more than one set of sketches or plans depends largely upon the facts, but it involves the same principles as where more than one set of detailed plans and specifications are drawn, consideration of which is taken up later.

An architect upon presentation and explanation of the sketches or preliminary plans to his employer is often directed to make certain changes, and frequently such changes increase the cost. In such instances an architect, for his own protection, should always advise his employer of this fact in writing even though such a statement may seem senseless or unnecessary. In municipal contracts or in contracts where the architect knows that only a certain amount is available with which to construct the building, this matter of making changes becomes extremely serious. While an architect is ordinarily bound to obey the instructions and directions of the contracting official who represents his employer, yet if in so doing the cost is being increased over the appropriation, it is proper for him to refuse to make the changes without corresponding cost-reducing modifications. The only other safe method is to offer to make the changes provided the official will give his personal written agreement to pay for all services rendered if the plans should be rejected or compensation refused for that reason.

After approval of the studies or sketches, then it is the architect's duty to furnish detailed plans and specifications conforming with the requirements heretofore mentioned for the preliminary plans. In this connection it might be noted that it has been held that blueprints furnished are sufficient to comply with the contract to furnish plans. On the other hand, it has been held that where the architect failed to include among his drawings a transverse section, and where the specifications were general as to concrete work, electric wiring, etc., he had not fulfilled his contract, the intimation being that the specifications for the construction contract *must* be definite.

This brings us to one of the most frequent causes of the trouble between owners, architects, and contractors; namely, the inability of some architects to express their requirements clearly, concisely, and in plain unequivocal English so that all concerned may read and know what their specifications mean and call for. Most of this trouble can be ascribed to the practice of copying specification provisions from some other person's work or from some ancient specifications with no regard or consideration as to whether the class of materials is the present market classification, or whether even obtainable except at an exorbitant price. Such specifications usually contain ambiguous phrases which have been rightly named "club or big stick clauses," unfair to all parties and which create the impression that the architect himself does not know what he wants, and that he expects to cover up his deficiency by other common phrases such as "the decision of the architect as to the true construction and meaning of the drawings and specifications shall be final"; "that all work and materials must be to the entire satisfaction of the architect"; "that all materials must be of the best quality"; "that all work must be done in the best manner as the architect shall direct," etc. Nor do these expressions always accomplish the expected result. For example, where a contract for a heating plant provided for "a complete and perfect job, even though every item required to make it such is not specially noted in the drawings or these specifications"; also that the contractor "shall furnish all labor, tools, and appliances necessary to complete his work according to these specifications, and shall perform his work in a true workmanlike manner in every particular, and thus provide the building with a durable and mechanically perfect system"; it was held that the contractor was not required to improve upon the plans in order to make a mechanically perfect system.

Similarly, where a contract requires the construction of a cellar according to specifications, it was held that an additional requirement that "the whole to be perfectly water-tight and guaranteed" only bound the contractor so far as his own work was concerned and that he was not held to guarantee that the plans would produce a water-tight job. In another instance, where a tin roof of the "best quality" was called for, the trial justice in charging the jury held that such a requirement was satisfied when the roof as finished "was equal to the standard contemplated by the contract." In another contract a reservoir was required to be built according to definite plans and specifications, and the contract further provided that "the work contemplated . . . is the construction of a water-tight reservoir," and it was held that that did not impose upon the contractors the responsibility of making the reservoir water-tight, because consideration of the entire terms of the contract showed that they had no discretion as to the method or means of doing the work. These numerous examples are given because of the tendency on the part of some architects and engineers to reject work under such circumstances, involving all concerned in expensive and needless litigation and opening themselves to severe and sometimes well merited criticism.

There has been a tendency in some quarters to specify in such a way that only one certain patented or exclusive kind of material can be used, when for all practical purposes the equal of that could be specified. This should be avoided because it often causes a contractor to increase his estimate, and because it opens the door for questioning the architect's motives. If the specifications are made liberal in this respect and call for material of a certain make or equal, the architect is of course the judge as to what is equal and the owner is thus protected in this respect. It might be here noted that if the specifications do call for a particular brand or equal, the contractor may use the equal material in the first instance, and it has been held that such use could not be made to depend upon the question as to whether the material specified was procurable or not. I quote the following excerpts from a late written discussion of the subject: "The engineer or professional adviser who draws up the specifications is too lazy to write out the details of the paragraph and so he says we will leave that to the judgment of the architect or the engineer. It is the result of his own mental laziness. Now, then, if you go to the opposite extreme and specify everything, there is nothing left for the engineer to decide, and there is nothing left for the arbitration to decide, . . . leaving also much less to fight about than if you left the things to the discretion of the engineer or put in 'big stick' compulsion clauses, which do not belong there."

"Let the professional advisers work entirely for the man who employs them, and nobody else, and not have him a judge of any kind whatever. When he is not acting as a judge he will write specifications that will explain themselves. . . . It is morally wrong to have a judge in litigation paid by one of the litigants. If our judges on the bench were paid that way . . . you would get wrong decisions; and this is a case where you propose to have the judge paid by one of them, the owner, and expect him to judge fairly between the owner and the contractor."

In connection with this subject, however, it should be noted that the satisfaction of an architect does not permit the architect to force his personal idiosyncrasies or personal tastes upon a contractor. To require work to be done "in the best workmanlike manner," or with "material of the best quality" does not permit the architect to arbitrarily and unreasonably declare that work or materials are not such as called for in the body of the specifications. The legal rule for these instances is "that which the law will say a contracting party or architect ought in reason to be satisfied with, that the law will say he is satisfied with"; or in other words, all that is required is materials and workmanship which would satisfy that legal creation named a "reasonable man."

Thus it is that materials and workmanship for a building cannot be compared with portraits, statuary, clothing, etc., which require the absolute satisfaction of personal taste.

A few jurisdictions have held that where work to the satisfaction of the architect is required, the architect acts as an arbitrator, whose decision is final and conclusive; that it is not a question of his good faith, and the only hope of the contractor is to prove that the expression of dissatisfaction on the part of the architect was the result of fraudulent collusion with the owner. This extreme legal interpretation, which might cause the contractor, excepting in cases of substantial performance, to forfeit his compensation, was apparently beyond the equitable views of the layman, and the Legislature of Pennsylvania in 1907 passed a statute providing that no contract clause making an architect's or engineer's award or certificate final or conclusive should oust the Courts of their jurisdiction, and that any controversy arising on such a contract should be determined in due course of law with the same effect as if such provisions were not in the contract. For some unknown reason municipal corporations and corporations with power to exercise the right of eminent domain were specifically excluded from the operation of this statute.

Further, the satisfaction or dissatisfaction of an architect must be promptly expressed, since it is held that when the architect has power to reject materials, and he does not do so, or does not inspect it until it is in place, and when its removal would cause serious loss to the builder, then such delay operated as a waiver and the builder need not take it out, and if required so to do he can recover his damages caused by the replacement from the owner upon the theory of a breach of the contract by the owner's agent, the architect.

Of course even under the strictest contract clauses, an architect cannot have the arbitrary right to remove any proper material actually in place, though he might in some jurisdictions refuse to permit such materials to be used and condemn the same as not fulfilling the requirements of the contract.

The above considerations call for the serious attention of the architect to his specifications, which should contain the following essential features:

"(1) COMPLETENESS — Every requirement properly specified, and provision made to check work to insure nothing is omitted.

(2) ACCURACY — Specifying clearly what is desired; correcting former errors, revising methods, etc.

(3) BREVITY — Elimination of a superfluous matter, and condensation of descriptions by careful selection of words and expressions.

(4) ARRANGEMENT — Placing subjects in proper and clearly defined divisions and sub-divisions to insure general conditions, etc., clearly indicating the work they were intended to govern, and to facilitate ease in reference."

This recommendation is so stated, enlarged, and the entire subject well considered in a Report on Uniform Specifications for Buildings, published in March, 1911, *Journal of the American Society of Engineering Contractors*, to which those further interested are referred.

The writer's personal experience in this regard causes him to recommend the English practice of having a statement of the quantities of the various kinds of work and materials made for the contractor to bid upon in addition to the plans and general specifications. That custom abroad has resulted in the architects giving over this work to another party named the "quantity surveyor" who is personally responsible to the contractor for the accuracy of his statement. At least one state has by legislative action required such a bill or list of quantities to be prepared and furnished by the architects or engineers of all public buildings, said list to be attached to the plans and specifications as a guide to the bidders. Such a bill or list of work and materials prepared by the architect who best knows what is going to be required of the contractor seems to be an easy solution of many of our serious building disputes.

There are instances where an owner has changed his mind after the architect has completed the general working drawings and specifications and the architect is then called upon to plan differently. In one case the architect was employed to prepare plans and specifications for a two-story building, which plans and specifications were duly completed. Thereafter at the employer's request the architect prepared plans for a three-story building. It was held that the two sets of plans were properly regarded as applying to two different buildings and that the architect might recover two and one-half per cent of the estimated cost of each Similarly a change of area of a building has been held to entitle the architect to charge and recover for two sets of plans. Thus it would seem that if complete plans and specifications are finished in accordance with the owner's suggestions, and the owner thereafter entirely changes the character or scope of the work, the architect may consider the order for the second set of plans and specifications as a new contract having no relation to the work done even under a prior written employment.

In some jurisdictions it is held to be the duty of the architect to furnish the owner with a form of contract, bid, and bond for the construction of the proposed building. This does not seem to be fairly implied under the usual contract of employment, and such a duty must depend either on a contract requirement to that effect or upon local custom. The mere fact that the employer approves the plans and specifications and signs the proper documents permitting said plans and specifications to be filed with a municipal building department has been held not to be any excuse for faults therein of which the employer is not a competent judge. This warning is given so that the architect may know that approval by an owner does not prevent such owner from later refusing either to accept the plans or to pay for the same; nor does it prevent him from setting up any defense as to the lack of skill or as to any faults or defects that may be found to exist therein.

The next duty would seem to be the securing of the approval of the plans and specifications prepared and accepted by the owner, by the Building Department, Art Commission, or whatever other body is required to pass upon same, so as to obtain the necessary permission to erect the building as planned. There is a serious question whether this duty is required to complete performance so as to earn the percentage payment for plans and specifications sufficient for bidding purposes or whether it is part of the superintendence. Having in mind the fact that plans and specifications are useless without such approval, it is suggested that this should as a matter of precaution be considered as a requirement involved in the preparation of plans and specifications and as a condition precedent to the recovery of the usual two and one-half (2½) per cent partial payment.

Provided the architect's employment is not restricted to a mere furnishing of drawings and specifications, the next duty is that of honestly and conscientiously advising the owner regarding the bids and bidders and assisting him in his selection of a responsible builder. Then comes the duty to furnish details as required and superintend the actual construction work.

In the preparation of the detail drawings care should be taken so that they do not require more than is shown or can be fairly implied from the original plans and specifications. The general rule seems to be that if the details vary materially from the original drawings and involve much additional labor or expense, and if the architect orders the contractor to do such work without giving him a written order as for extra work, then the contractor may refuse to proceed with the work at the contract price and recover at least for all the work he had done; or he may proceed with the work as ordered after protest not only to the owner but to the architect, and thus raise the legal question as to whether such work was as a matter of law within his contract or not.

In the superintendence an architect must bestow such care and attention that no material variation in the plans and specifications is permitted, and detect and guard against all such defects as can be discovered by the exercise of ordinary skill and attention. Failure so to do may cause the architect to lose his compensation even though the owner may have a remedy against the contractor.

Since the employment of an architect depends upon a personal trust and confidence reposed in his skill, the common statement is made that the architect cannot be permitted to delegate any of his duties or powers without express authority to do so. The modern building and the practical changes in our methods of handling building construction work has required and permitted some divergence from this absolute rule of ancient law. At the present time there seem to be four general exceptions: first, where there is a lawful custom or usage to authorize it; second, when the act is purely ministerial or in other words requires no exercise of judgment; third, where the object of the agency cannot be attained otherwise; and fourth, where the employer is aware that the architect will appoint a subordinate for certain details. In all instances of delegation the architect must see that the acts and operations of his assistants are just, reasonable, and correct; and since he is responsible for the acts and defaults of his subordinates to whom he intrusted details, he should choose subordinates having the necessary knowledge, experience and ability. A common source of trouble, irritation, and annoyance upon a building is the architect's representative, and the cause may be due to his incompatibility, ignorance, lack of experience, or dishonesty. Many of these subordinates are newly graduated college men with a great deal of theoretical or book knowledge, but with absolutely no conception of the practical ways of doing things or of the fact that time is an essential element in building construction. In addition, their usual lack of knowledge of the relations between the various trades, the power of labor unions and their walking delegates, and their general inexperience in dealing with men, coupled with their pride and failure to seek and ask advice, do not tend to hasten the work, or create the proper atmosphere for hearty and zealous co-operation on the part of all concerned.

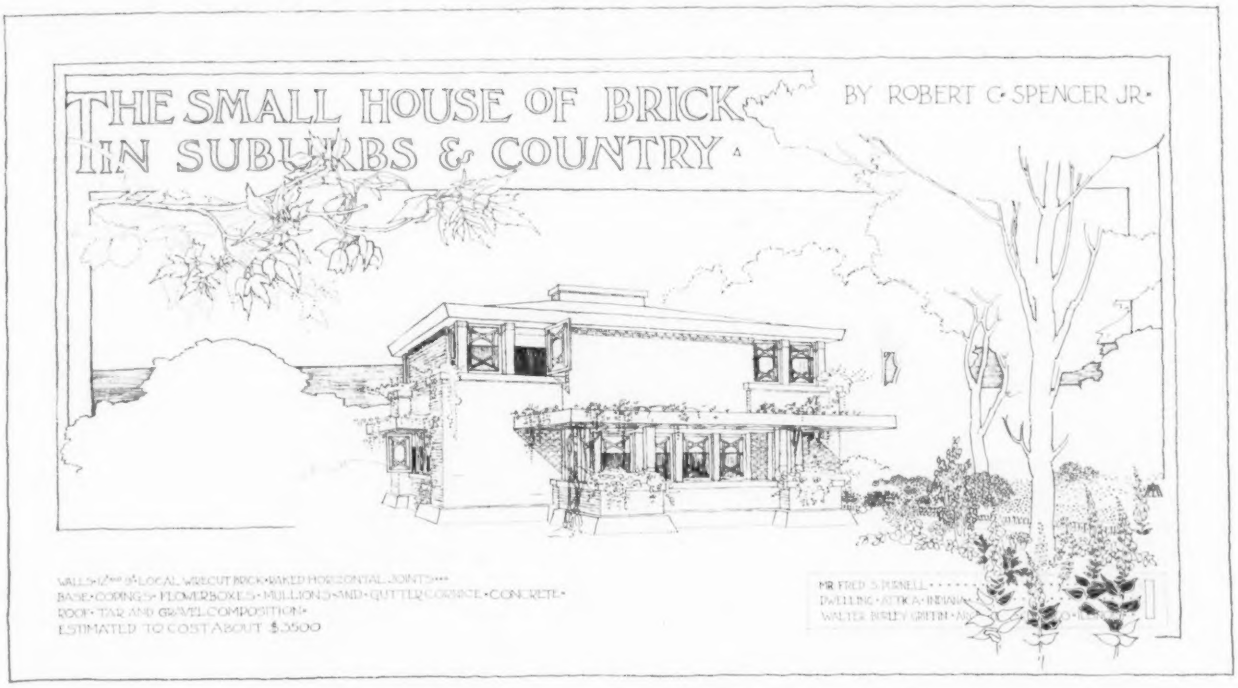
Another type of clerk of the works consists of a class of men who know what is right, but their remuneration is so small that they have to depend upon their position to aid them in securing what they consider living expenses. In this connection another fruitful source of trouble is the retention by the architect of a clerk of the works who has taken a grudge against the contractor, sub-contractor or foreman, so that for personal reasons, or to satisfy such personal grudge, work well within the specifications is ordered to be replaced or materials rejected which properly should be accepted.

Most, if not all, of these troubles may be avoided if the architect will give the job the personal supervision which it requires, and which it is his duty to give. If the employe is without experience, the architect should see that some experienced person keeps close watch of things and teaches and advises the beginner. He should also remember that his clerk of the works or inspector is human and not infallible, and his assertions and statements should be verified by the architect personally, just as he would verify statements or opinions of the contractor or of a materialman.

Upon one occasion an architect did not measure the work or check the estimate upon which his certificate for a payment was issued, and it was objected that such a delegation of authority to another would invalidate the certificate. The Court held that that did not make the certificate bad, it being admitted that the architect had behaved in perfect honesty in the matter and that there was nothing in the shape of corruption or improper conduct attributable to him. In that case there was a suggestion that for the details of much of an architect's work it might well be that the architect, while well skilled in the general rules of architecture, etc., and a thoroughly competent architect, might not be skilled in the particular details of general construction, and therefore that a subordinate might be better able to make the measurements and estimate upon which the architect's certificate would be based than the architect himself.

An architect as well as every employee or servant is bound to obey all lawful orders of the employer within the scope of the employment; and he must not be guilty of gross moral misconduct, or of habitual negligence in business, or of conduct calculated seriously to injure his employer or his business. The penalty may be instant dismissal.

Our considerations of the architect's duty to his employer have been legally summed as follows: "Those who employ him have a right to his best judgment, to his skill, to his advice, to consultations with him and to his absolute fidelity and good faith, and when the architect has contributed these things to the person who employs him his duty has been fulfilled."



THE SMALL HOUSE OF BRICK IN SUBURBS & COUNTRY

BY ROBERT C. SPENCER JR.

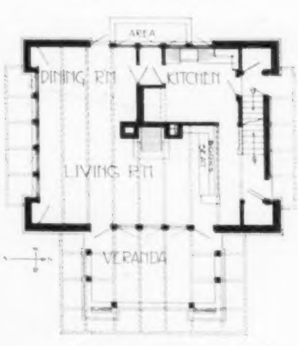
AN INTERESTING topic, to be sure, offering some latitude in its interpretation.

But how much or how little may we mean by "small"? To be liberal, let us say fifteen thousand dollars, more or less, preferably much less, providing that the material for illustrations can be found without going abroad, where, of course, there is easy picking.

Doubtless many architects who can build attractive little brick houses and bungalows for the readers of popular illustrated journals to cost but three or four thousand dollars — *on paper* — would throw up their hands if limited to an appropriation of six. But to build, or to discover built, well designed, individual houses, wholly of brick, or of the "half and half" type, costing between five to ten thousand — to say nothing of a still lower price limit — is another story. This is true, even in our most productive brick-making districts.

In looking over nine miscellaneous volumes of THE BRICKBUILDER, ranging over a period of twelve years (and this journal probably publishes more good brick houses than any other), I found illustrated thirty-two houses of moderate cost, representing the work of a dozen architects, which seemed good enough to illustrate this article, had they not already appeared. Than this, no better illustration could well be had of the rarity of good small brick houses in the United States. Of these thirty-two houses not all possessed particularly interesting or individual qualities of design, and only a few showed any marked degree of brick technique.

SECOND FLOOR PLAN



FIRST FLOOR PLAN

Upon the beauty and sterling structural qualities of brick as a material for the exterior walls or wall envelopment of the small house, it is not the purpose of this article to dwell.

The advantages of brick as a building material at once beautiful, adaptable, and durable are too well known and have been already too well set forth in these columns to need repetition. But why, since brick is so desirable a structural material for even the most modest cottage or bungalow, is it so seldom used for minor residential work, and when used, why are the results usually so bald and commonplace?

The cost, by comparison with all frame, or with frame and stucco construction, is the chief reason. Minor reasons are a frame-house habit of mind, which we as a people have acquired through over a century of cheap lumber. There is also the difficulty of securing good brick masons for small jobs, and, in small towns, a lack of practical experience in the use of brick on the part of the majority of those architects whose practice is largely restricted to the small house. This latter condition, of course, is largely due to the saving in *first cost* effected by adhering to the customary frame construction. Stucco on wood or metal lath is only fairly beginning to replace wood for surface envelopment, because of the relatively small difference in cost and the elimination of expensive repainting or restaining, but country

A larger house of the three-bedroom type with roomy attics, stucco and "half timber" treatment of gables, walls of kiln-run pavers, in dull, buff colored mortar. Base, sills, and copings of bricks on edge. Shingled roof. Somewhat unusual in its placing, but very convenient and livable is the large living and dining porch, which is screened in summer and glazed in winter. Cost about $7,500 at Morgan Park, a suburb of Chicago.

architect-builders still hesitate to experiment with it. They still cling to the painfully neat American clapboard, and build wooden *shells*, not *walls*.

The American is always ready to take a chance, if he feels that by so doing he can make money, or save money, which is sometimes, but not always, the same thing.

In deciding for a frame house, he takes an extra chance of fire loss and faces a certainty (although he seldom estimates it as an average annual tax) in the future cost of repainting and repair which may be forecast with a reasonable degree of accuracy, if he expects to maintain appearances, as well as his property.

If he decides for frame and stucco, he takes a smaller chance as to fire, particularly as to exposure from *without*, although in the country, or in a roomy suburban lot, there is small danger of fire exposure, except from within. And in this latter respect — inside exposure — the average brick house is also vulnerable only in a less degree.

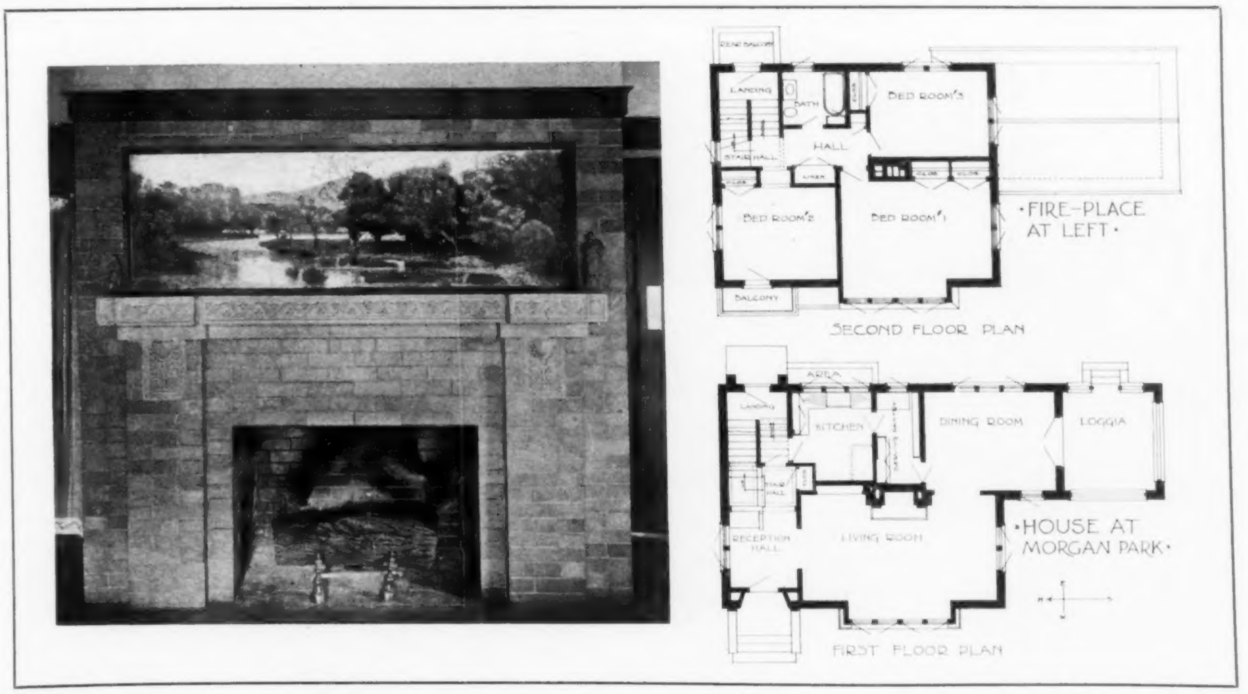
With wooden floor and partition construction, no metal lathing or fire-stopping, poorly built chimneys, etc., everything may readily burn, or be wrecked by a fire, except the bare brick walls. Yet, is it not indeed worth a little both in money and sentiment if the walls can be depended upon to remain standing?

For the builder of the small house, the saving in first cost, due to all-frame construction, will in a few years cease.

In the suburbs of our larger cities, the wide adoption of cement stucco for exterior envelopment, by the speculative builders of cheap houses, is the first step away from wood toward brick, showing clearly how the cost of lumber good enough for exposed outside work has advanced in the last few years.

While there are many doubters of the lasting qualities of exterior cement stucco over wood, there is good reason to believe that it can with proper care be made to last as long as the average house enveloped in wood. Costing but a small percentage more, and more substantial in appearance with a decided saving in upkeep, its popularity must continue to grow as the price of lumber continues to rise, and as a knowledge of proper methods of its use and of its possibilities becomes common.

At present but few architects are able to secure good stucco color and texture, particularly in country work, dependent upon country builders. Ready-prepared



·FIRE-PLACE AT LEFT·

·HOUSE AT MORGAN PARK·

"rough-cast" or float finish material, ensuring fairly uniform matching of samples for color and texture, are not available for the small house, except within a relatively short haul from the few producing centers for such material which now exist.

The finished wall effect of any selected make or shade of brick in combination with different mortars and in different bonds can be anticipated with reasonable certainty, and verified in advance by the experimental erection of bits of sample wall a few square feet in area on the building site while the foundations are being laid.

There is another difficulty common in frame construction which brick avoids and which the average architect seems not always to appreciate.

Where the contour of the home site is enough out of level to preclude artificial leveling to a single water table or base grade; and the walls of the house to be effective must grow sheer up from the slopes of the ground, — only solid masonry walls are satisfying.

A ground level water table, or stylobate, is good only on a site naturally level, or easily leveled without marring its natural character.

Extensive formal terracing may overcome this difficulty, but the small house owner cannot afford the long formal terrace as a flat base for his building, and terrace walls on a picturesque or broken site should be of masonry. Pseudo terraces — commonly termed "open porches," with frame walls and wooden floor construction instead of a solid, satisfying earthen fill, are, of course, a common adjunct of the frame house.

If, for the sake of paving with brick, tile, or cement, walls of porches and terraces are built of brick in connection with frame and stucco houses, there is a large risk of cracks developing where the frame and brick walls join to form flush stucco surfaces.

For a house of moderate cost, bricks of local or not far distant manufacture must be used for economy. In the middle West we are fortunate in being able to secure excellent sand-moulds or pavers at prices varying from $6.00 to $10.00 at the kilns and from $12.00 to $20.00 or more per m. delivered at the building in Chicago and suburbs.

Most architects, as well as many laymen, have now learned to know the beauty of rough bricks, particularly for suburban and country work.

One of the chief difficulties in securing effective rough brickwork is the common predilection, which appears to be shared by many architects, as well as owners, for very dark gray to black mortar for the facing joints, although every colorist knows that even a small admixture of black tends to kill and muddy his color tones in any medium. In rough brickwork, the brick unit is relatively so small, that the colors of bricks and very dark mortar tend to mix in the eye of the observer, producing a dull, hard, and more or less "muddy" effect. For purity and richness of color quality and nice definition of bond texture, the mortar should always be at least somewhat lighter than the average tone of the bricks.

As a rule, the light gray of the lime and cement mortar ordinarily used for brickwork at the present time is sufficiently toned away from a dead white to produce very satisfactory results with the lighter red bricks. With bricks of a deep, strong red or with the deeper brown or purplish shades of hard burned kiln-run pavers, a small quantity of lampblack in the mortar produces a softer and quieter gray.

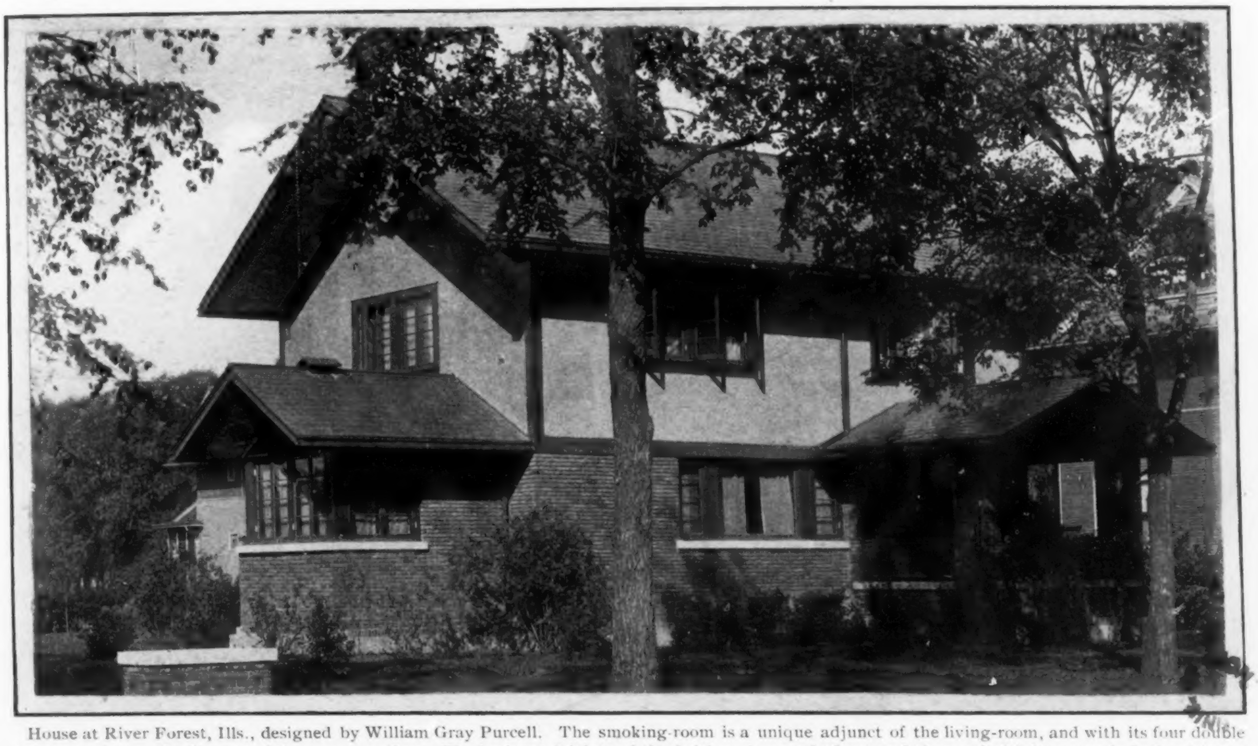
With the ordinary mineral red mortar color, a dull, soft pinkish shade, considerably lighter than the average tones of the bricks may be obtained, which is very agreeable, and not so hard in effect as the light gray joints. With the buffs or ochres, rich warm effects may

A compact little four-bedroom house of the suburban type, designed by Tallmadge and Watson, with den or library on first floor; living and dining porch placed similarly to that at Morgan Park in preceding illustrations. Brick base, sills, and band courses in gray mortar; slate roofing. Built on the south side of Chicago at a cost of about $6,500. Plans below.

Detail of a composite brick and frame house by Tallmadge and Watson.

SECOND FLOOR PLAN

FIRST FLOOR PLAN



House at River Forest, Ills., designed by William Gray Purcell. The smoking-room is a unique adjunct of the living-room, and with its four double casements is practically a porch in warm weather. The horizontal joints of the brickwork are raked out and the vertical joints struck flush, giving a decided horizontal texture to the first story. The roof is of variegated gray-green and purple slate. The rough cast surfaces above the first story are of a rich warm buff color, with olive green wood trim, and inlays of colored tiles.

be given to walls of sand-mould bricks; care being taken not to make the color too strong.

Returning to the use of lampblack for the deeper gray mortar tones, the writer has had so much trouble in obtaining the proper shading and an evenly colored mortar that he is inclined to depend entirely upon the cement mixture, even where the resulting shade is lighter than might be desired.

Owners, who often have a fatal predilection for very dark joints, have on a number of occasions taken upon themselves (in their rôles of active assistant superintendents) to order the masons to increase the quantity of lampblack used, much to the detriment of the work. As a result of this sort of "butting in," on a large country place the gate lodge has medium gray joints, the stable and garage nearly white joints, and the house shows all shades from light gray to black, for the owner was a very determined person and set in his ways.

SECOND FLOOR PLAN

FIRST FLOOR PLAN

Mortar mixers appear to be very careless in mixing mortar color, however earnestly warned by superintendents. Lampblack appears to differ from other colors in having comparatively little effect in darkening mortar up to a certain point, after which the darkening is so rapid (running to a deep blue-gray) that it seems dangerous to attempt a deep gray, except by the use of a pure, dark setting cement, gauged with just enough lime mortar to allow free working.

Temperature also seems to have much to do with the final color of mortar toned down with lampblack. When used in very cold weather (as is found necessary in this latitude) it does not seem to bleach out in drying, as in warm weather.

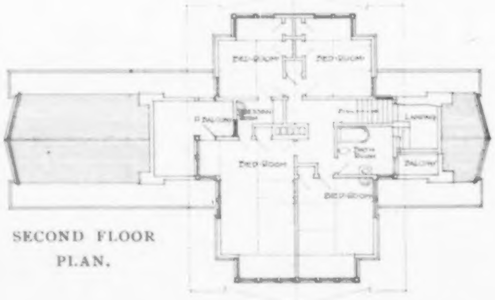
Where the erection of a large brick house is commenced rather late in the

A house at Evanston, Ills., designed by Walter Burley Griffin, Architect, which cost about $10,000. First story of wire cut stiff mud process bricks from Ohio (red shading into yellow olive), with deeply raked horizontal joints. Rough cast above, soft light tan in color. Exterior woodwork stained brown. For a comparatively small house the plan places rather unusual emphasis on the out-door living accommodations; the main interior space of the veranda being about 16 by 22 feet, and a sleeping porch above of liberal dimensions. The treatment of eaves and shingled roofs and the wood muntined casements give a somewhat Japanese touch to the design, which is pleasing however outside the pale of conventional, "stand-pat" architecture.

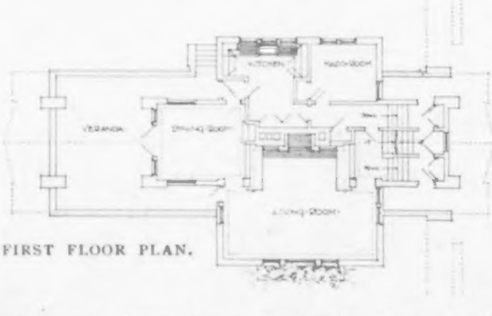
Fall, the mortar is liable to be subjected to a wide range of temperature. To what extent the widely disappointing variations in mortar color, from light gray to blue-black, in certain cases, have been due to carelessness in mixing rather than to these extreme changes in temperature, there is, of course, no means of knowing, and the fact can only be ascertained by special experiments. But wide temperature variations furnish an excuse to the mason. Within certain limits, it is true that variations in mortar tones are agreeable, but it is often difficult to hold bricklayers to a sufficiently small variation for a reasonably uniform effect in all wall surfaces.

With any kind of mortar color, the architect must be constantly on guard against variations which will cause a noticeable patchy effect, as between different large areas of wall surface.

While horizontal joints struck from *below* undoubtedly weather better than those struck from above, the latter produce a more pleasing effect, particularly where seen from below. The former if neatly struck are shadowed by the next course of bricks and the shadows neutralize the contrast of light and dark between the mortar and the bricks.



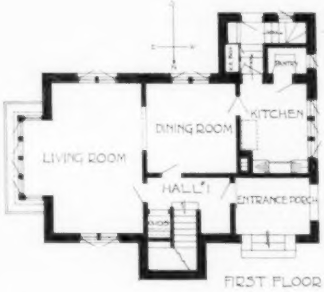
SECOND FLOOR PLAN.



FIRST FLOOR PLAN.

A discussion of brick bonds would add little to what has already been written and illustrated in this journal. For the small house, what is known as "Chicago bond," one course of headers every fifth or sixth course, looks well, particularly if worked out carefully to space with heights of openings, and is the most economical, particularly where the backing bricks, as often happens, differ in make and size from those used in the facing.

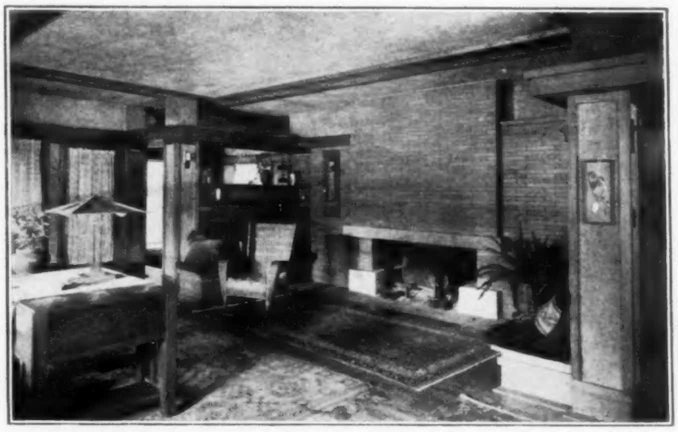
Notwithstanding the wide range of effects obtainable in bonding, in using bricks of two or more quite different shades and varying the mortar color, they are, as a rule, too expensive for the small brick house, and, unless the unit of bond texture is small, as in the case of cross-bond, which is scarcely a pattern at all, there is not enough broad, unbroken wall surface to justify its use. One of the best examples known to the writer of strong pattern of relatively large scale in domestic work, is "Sandhouse"



FIRST FLOOR PLAN

▪THIS GATE LODGE AT
LAKE FOREST WOULD
MAKE A GOOD SUBURBAN
COTTAGE OF THE THREE
BED-ROOM TYPE▪
▪WALLS ARE KILN-RUN
PAVERS IN GRAY MORTAR▪
▪ROOF, RED AKRON TILE▪
▪THE STONE-COPED GABLES
LOSE THEIR SEVERITY AMID
THE SURROUNDING FOLIAGE▪

SECOND FLOOR PLAN



▪INTERIOR OF
HOUS AT
EVANSTON BY
W▪B▪GRIFFIN
ARCHITECT▪

▪SHOWING THE
EFFECTIVENESS
OF A FIRE PLACE
DESIGNED ON
SIMPLE LINES▪

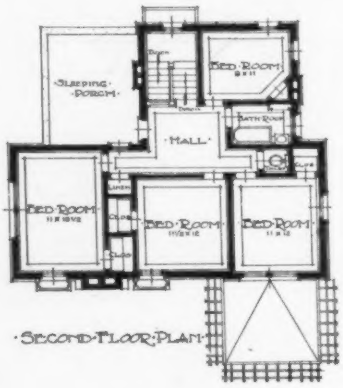
in England, designed by Mr. Troup. Although there is a good deal of wall surface, and the pattern has been very cleverly managed, it would seem to little enhance the beauty of the building, although, of course, it adds a decidedly individual touch.

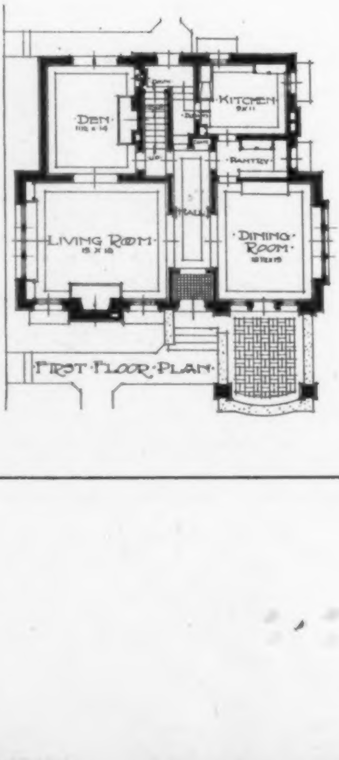
In building of brick with a sharp eye to economy, it was suggested in this publication some years ago, by Mr. Cram, and illustrated by sketches of some charming English cottages of brick, that 9-inch walls, above the basement, for a small two-story house or cottage should be considered sufficient. With good, hard bricks, laid in mortar containing plenty of Portland cement, this would seem to be true, particularly in view of the comparatively recent development of damp-proofing preparations, which, when thoroughly applied to the inside wall surface, ought to make a well-built 9-inch wall more impervious to dampness than the 13-inch wall, without such treatment. As for strength, the two-story 9-inch wall should be sufficiently heavy, carrying moderate spans, particularly if narrow piers are avoided and buttresses or pilasters (either internal or external) introduced to break up the longer stretches of wall. By reducing the customary story height, 2 feet can be saved in the height of a two-story house, the rooms made cozier and more homelike, and the number of steps between floors reduced, the latter a convenience and comfort not to be despised.

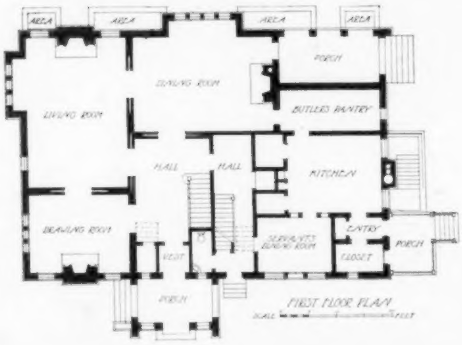
The writer's own house has a first-story height of eight feet in the clear, the dimensions of the living room being 19 x 25 and a second-story height of 7 feet 6 inches. Notwithstanding popular prejudice as to the superior airiness of high rooms, this house is delightfully cool in summer, if there is any coolness out of doors. All of the windows are casements, opening out, giving us the benefit of each entire opening, catching every passing breeze, and adding far more to the ventilation of the house in warm weather than would an additional foot of height in each story, since in warm weather the heated air in any room remains stagnant only above the level of the window tops, or in the case of a house with double hung sash, above the top of the actual warm weather opening, which in most houses is at the meeting rail and not at the top of the window.

HOUSE AT DENVER, COLORADO.

Varian & Varian, Architects.





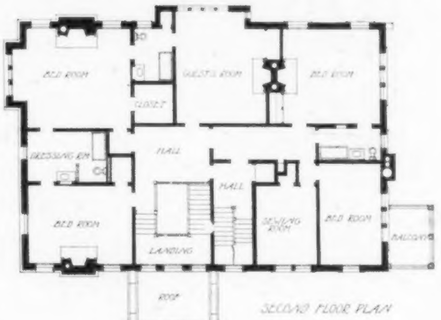


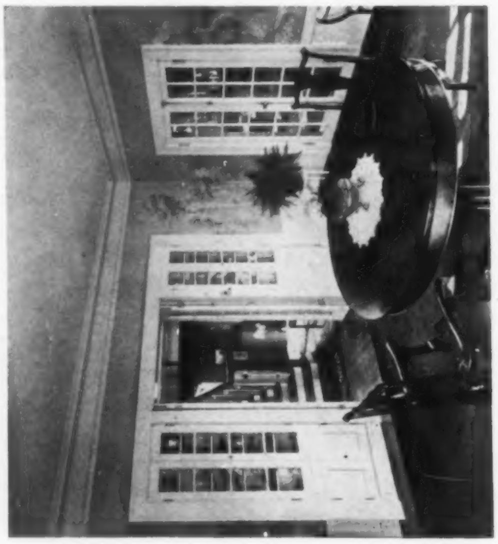
HOUSE

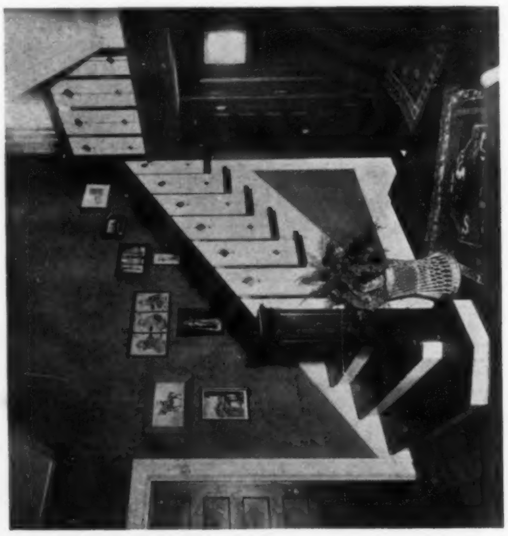
AT

ST. LOUIS, MO.

Mauran, Russell
& Garden,
Architects.

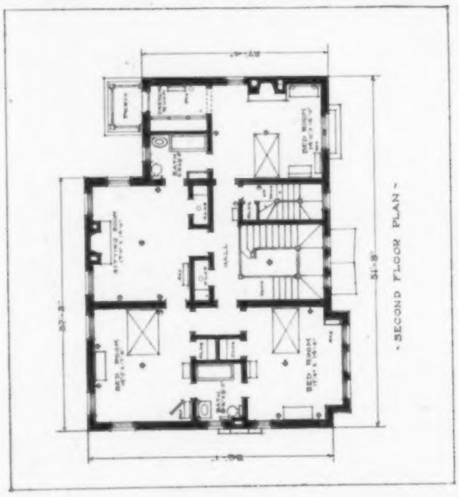


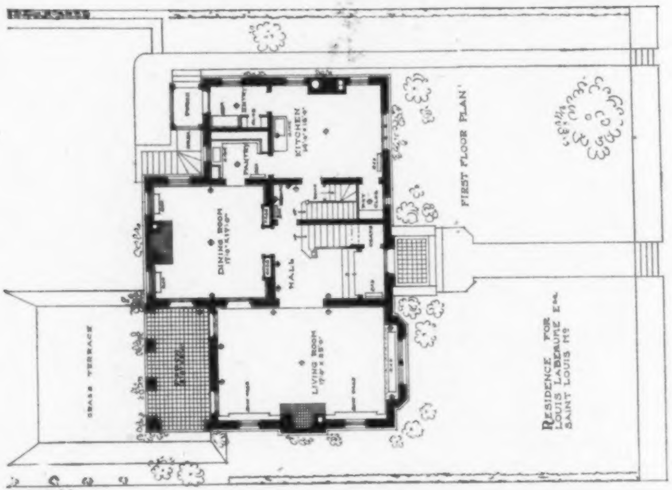


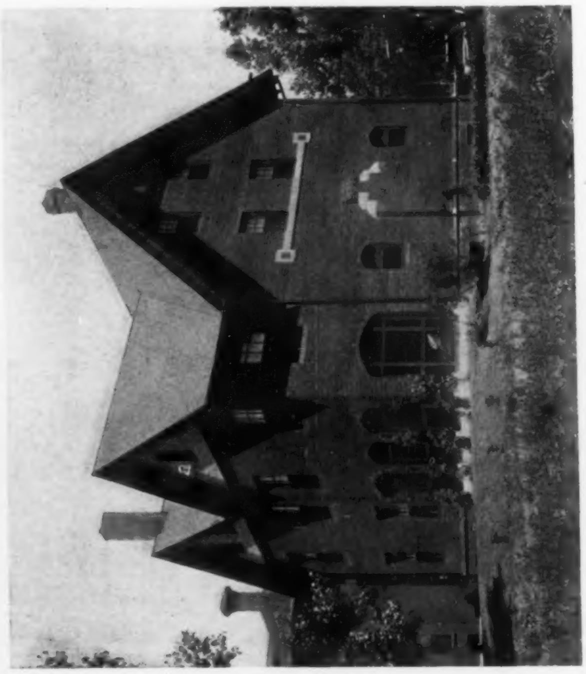


HOUSE AT ST. LOUIS, MO.

Mariner & La Beaume, Architects.







Editorial Comment and Miscellany.

PERRY MEMORIAL COMPETITION.

THE Building Committee of the Perry Memorial announces a competition for the selection of an architect for the Memorial which will be erected at Put-In-Bay, South Bass Island, Lake Erie, near the place where Perry s victorious action was fought. The Memorial will commemorate not only the victory but the subsequent one hundred years of peace between the United States and Great Britain.

It will consist of a lofty commemorative monument with a museum of historic relics at its base standing in a reservation of fourteen acres. $600,000 will be expended upon the construction of the monument and museum. The reservation will be designed as a suitable setting for the Memorial.

LA SALLE HOTEL, CHICAGO.
Entire trim above lower three stories of architectural terra cotta, executed by the Northwestern Terra Cotta Company.
Holabird & Roche, Architects.

DETAIL FOR HIGH SCHOOL.
Executed by the South Amboy Terra Cotta Company.
Guilbert & Betelle, Architects.

The program, which conforms to the principles approved by the American Institute of Architects, has been so drawn under the direction of the Committee and Mr. Frank Miles Day, adviser to the Committee, that the problem presented is a most attractive one. Competitors will have the fullest scope for their artistic imagination. The prize of the competition will be the appointment as architect to design and superintend the construction of the Memorial. There are also to be three premiums for the authors of the designs placed next to the winner.

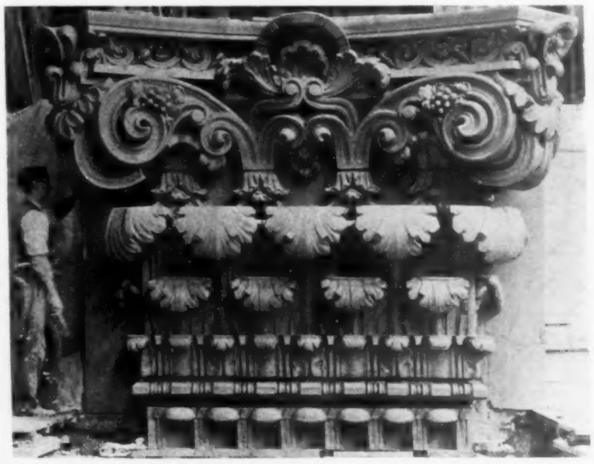
The Building Committee will be advised in making its awards by a jury of well-known experts.

Architects desiring a copy of the program, which sets forth the conditions of participation, should make application to Mr. Webster P. Huntington, Secretary to the Building Committee, Federal Building, Cleveland, Ohio.

DETAIL.
Executed by the Rookwood Pottery Company.

PARNELL MONUMENT, DUBLIN.

THE Parnell national monument, which was unveiled in Dublin, Ireland, on October 1st, was one of the last works of the Irish-American sculptor, Augustus Saint Gaudens. The monument, which is built of Shantalla granite, is a triangular obelisk, rising 67 feet above the street level and crowned with a bronze tripod 8 feet high. The base rests on a platform 26 feet in diameter,



DETAIL FOR STATE EDUCATIONAL BUILDING, ALBANY, N. Y.
Executed in terra cotta by the Atlantic Terra Cotta Company.
Palmer & Hornbostel, Architects.

DETAIL FOR STATE EDUCATIONAL BUILDING, ALBANY, N. Y.
Executed in terra cotta by the Atlantic Terra Cotta Company.
Palmer & Hornbostel, Architects.

which is inlaid with a large trefoil of Barna granite, embracing the area of the base. The bronze statue of Parnell, 8 feet high, stands on a projecting pedestal about 9 feet above the street. Around the pedestal and the base of the monument are elaborate carvings with swags, underneath which are inlaid bronze wreaths and plaques. The entire cost of the monument, including the masonry and architectural work, was approximately $42,000. Henry Bacon, New York, prepared the architectural drawings.

"ART AND THE NATION."

THE ARTS AND PROGRESS for October contains an editorial on "Art and the Nation" which shows how architects, painters, and sculptors are not infrequently treated by building committees, public officials, and private individuals of wealth as though they were contractors, dealers in mere commodities, men to be hired as day laborers without regard to brains, inspiration or technics, training and skill. The article cites how often a building is dedicated, a statue unveiled or a portrait presented without the name of the artist being more than mentioned. It further states that many monuments have been erected to our heroes of war, a few to our statesmen, less to our writers, but none to our artists, and concludes with the encouraging thought, — "None are able to deny that conditions are improving."

DETAIL FOR STATE EDUCATIONAL BUILDING, ALBANY, N. Y.
Executed in terra cotta by the Atlantic Terra Cotta Company.
Palmer & Hornbostel, Architects.

ANNUAL EXHIBITION OF THE ARCHITECTURAL LEAGUE.

THE Architectural League of New York City at its last regular meeting defeated the proposition of charging a fee to non-members for submitting work in their annual exhibitions. The proposed fee was to be one dollar per square foot with a minimum charge of five dollars. The point was made that no matter at what sacrifice to themselves as league members, the annual exhibition should offer an open door to all exhibitors who have valuable material to show.

GATE LODGE, SPRING GROVE CEMETERY, CINCINNATI, OHIO.
Covered with green glaze "crown" Reinforced English Shingle Tile manufactured by The Cincinnati Roofing Tile & Terra Cotta Company.
Elzner & Anderson, Architects.

Since the exhibition of the League has become rather an important institution it was voted to charge an admission fee of twenty-five cents on each day except Sundays. There will be, however, the usual liberality in the distribution of tickets free to students and draftsmen.

NEW CONVENTION HALL, PHILADELPHIA.

WORK has been started on Philadelphia's new Municipal Convention Hall which overlooks the Schuylkill River from a raised terrace, 70 feet above the

FAIENCE WALL FOUNTAIN IN AN APARTMENT BUILDING.
Executed by The Hartford Faience Company.
Russell F. Barker, Architect.

water. The building itself will be 624 feet long by 450 feet wide, finished in granite, light gray brick, and terra cotta. The auditorium will have a seating capacity of 18,500, which may be subdivided by means of a fire curtain 6 feet thick. There will be no stairways, and all approaches to the different floors will be inclined planes. The building will cost approximately $1,500,000 and has been designed by John T. Windrim, Architect.

BRONZE AWARD FOR ARCHITECTURAL MERIT.

DETAIL FOR STORE BUILDING.
Executed by Conkling-Armstrong Terra Cotta Company.
H. J. Klutho, Architect.

THE Architectural Club of South Bend, Indiana, has recently held two exhibitions, one in Indianapolis and the other in their home city. In order to stimulate architectural merit in their buildings the Club has established an annual honor award for the best building project completed in South Bend or vicinity. The award will be a bronze relief suitably inscribed and will be attached to the building selected by the jury of award. The announcement of same will be made at a formal dinner following the annual meeting at the Club.

IN GENERAL.

Thornton A. Herr and Leon F. Urbain have formed a copartnership for the practice of architecture under the firm name of Herr & Urbain, with offices in the Marquette Building, Chicago.

DETAIL BY WARREN & WETMORE, ARCHITECTS.
The New Jersey Terra Cotta Company, Makers.

The architectural firm of Reinecke & Jenkinson, Sioux City, Iowa, has been dissolved. William A. Jenkinson will continue the practice of architecture with Milton J. Henoch, under the firm name of Jenkinson & Henoch, at 406 United Bank Building. Manufacturers' catalogues and samples solicited.

DETAIL BY J. H. DESIBOUR, ARCHITECT.
New York Architectural Terra Cotta Company, Makers.

The American Enameled Brick & Tile Company will furnish approximately 200,000 English size, dull finish, enameled brick for the United

DETAIL BY
ROBERT A. SCHUMANN,
ARCHITECT.
Executed in white mat glaze terra cotta by O. W. Ketcham Terra Cotta Works.

HOUSE AT ST. LOUIS, MO.
Built of Roman Brick furnished by the Hydraulic-Press Brick Company.
William A. Lucas, Architect.

States Post Office and Custom House, Porto Rico, W. I. The brick will be shipped by sailing vessel.

The Junior members of the Birmingham Society of Architects have organized an Atelier with Wm. Leslie Welton, holder of the Rotch Traveling Scholarship, as patron.

STORE BUILDING, DETROIT, MICH.
Terra cotta furnished by the Winkle Terra Cotta Company.
Frederick T. Bancroft, Architect.

A small book relative to the courses of instruction together with other features of the Lowthorpe School of Landscape Architecture, Gardening, and Horticulture for women can be obtained by addressing Lowthorpe School, Groton, Mass.

Arthur T. Remick, architect, has removed his offices from 37 East 28th street to 103 Park avenue, New York City.

The architectural firm of Cleverdon & Putzel, 41 Union Square, West, New York City, has dissolved. Robert N. Cleverdon will continue as the firm's successor, and Joseph Putzel will practise as a consulting architect and appraiser of buildings.

The Rhode Island Chapter of the A. I. A. will hold an exhibition of architectural and municipal improvements in Memorial Hall, Providence, from October the 21st to November the 4th.

Frederick A. Kendall and Delos H. Smith have formed a copartnership for the practice of architecture, with offices in the Corcoran Building, Washington, D. C.

Charles Russell Lombard announces the opening of offices for the practice of architecture at 95 Exchange street, Portland, Me.

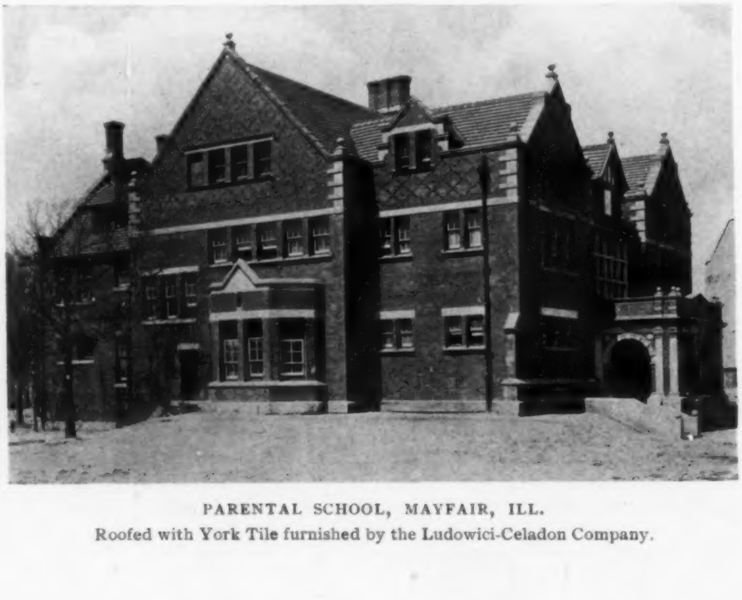
The contract has been let for the New Field Museum to be built in Jackson Park, Chicago, at a cost of $4,500,000.

Considerable regret will be felt over the closing of the famous old landmark, Long's Hotel, located in Bond street, London. This is one of the many historic places which has had to give way to the ever increasing needs of modern commercialism.

Plans are being prepared for a $4,000,000 building to be erected on the public square in Cleveland, Ohio, which will be used for a railway terminal, hotel, and offices.

The contract has been let for an addition to the British Parliament buildings at Victoria, Canada. The new part is to be erected of British Columbia stone similar to that used in the original structure and will cost when completed $1,250,000.

It is reported that a large university will soon be founded on Staten Island, New York, which in wealth and equipment will rival all others. It is to be erected in memory of Christopher Columbus.



PARENTAL SCHOOL, MAYFAIR, ILL.
Roofed with York Tile furnished by the Ludowici-Celadon Company.

The Prix de Rome for sculpture has been awarded to Mlle. Heuvelmans, an honor which no woman has ever won before. Mlle. Heuvelmans is the daughter of a cabinet-maker and appears to have discovered her liking for this work when eighteen years old.

Archie H. Hubbard, architect, formerly of Urbana, Ill., has removed his offices to 300 First National Bank Building, Champaign, Ill.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., October 3, 1911.

SEALED PROPOSALS will be received in this office until 3 o'clock P. M. on the 16th day of November, 1911, and then opened, for the construction, including roof and ground surface drainage system, of a four-story, stone faced, fireproof building, of approximately 90,000 square feet of ground area, for the Bureau of Engraving and Printing, WASHINGTON, D. C. Drawings and specifications may be obtained at this office at the discretion of the Supervising Architect, but will not be ready for delivery before October 21, 1911.

JAMES KNOX TAYLOR, *Supervising Architect.*

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Boston, 164 Federal St.
New York, 30 Church St., Room 337
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CANADIAN MATHEWS CO., Ltd., 28 Sheppard St., TORONTO
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House at Cleveland, Ohio . . . . . Plate 140

J. MILTON DYER, Architect

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Approved by the Standing Committee on Competitions of the American Institute of Architects

The Public Auditorium Commission of Portland, Oregon, invites Architects of experience and in good standing to compete for a Public Auditorium to cost $450,000.00.

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THE BRICKBUILDER'S ANNUAL ARCHITECTURAL TERRA COTTA COMPETITION.

Problem: A Store and Loft Building from Four to Six Stories High.

FIRST PRIZE, $500. SECOND PRIZE, $250. THIRD PRIZE, $150.
FOURTH PRIZE, $100. HONORABLE MENTIONS.

COMPETITION CLOSES AT 5 P.M., MONDAY, JANUARY 8, 1912.

PROGRAM.

THE problem is a COMBINATION STORE AND LOFT BUILDING FROM FOUR TO SIX STORIES HIGH. The site is assumed to be in the middle of a city block located in the shopping district. The land is level and has 50 feet frontage and is 100 feet deep. The building is to cover the entire lot on first floor only, with suitable provision for natural lighting of rear portion of this floor. The lighting of other floors is left to the designer. The basement, first and second floors are to be occupied by a concern doing a retail business. Since the character of the business may influence the design it is suggested that the store portion of the building be treated either for the sale of pianos, jewelry, millinery, men's furnishings, boots and shoes, furs, sporting goods, or some similar line of business. The plans above the second story are to be of the loft type.

The exterior of the building is to be designed entirely in architectural terra cotta, and it is suggested that at least portions of the walls be treated in color. It is further suggested that provision be made in the design for the placing of signs.

The object of this competition is to encourage a study of the use of architectural terra cotta in this particular type of building. There is no limit set on the cost, but the design must be suitable for the character of the building and for the material in which it is to be executed.

The following points will be considered in judging the designs:

A — The general excellence of the design, its adaptability to the prescribed material and character of the building under consideration.

B — The excellence of the first-story plan which, in addition to an attractive frontal treatment, must provide an entrance to a hallway in which will be located an elevator and staircase.

DRAWING REQUIRED. (There is to be but one.)

On a sheet of unmounted white paper measuring exactly 35 inches by 26 inches, with strong border lines drawn one inch from edges, giving a space inside the border lines of 33 inches by 24 inches, show:

The front elevation drawn at a scale of four feet to the inch.

The first-floor plan and a typical loft plan drawn at a scale of 16 feet to the inch.

A sufficient number of exterior details drawn at a scale of one-half inch to the foot to completely fill the remainder of the sheet.

The details should indicate in a general way the jointing of the terra cotta and the sizes of the blocks.

The color scheme is to be indicated either by a key or a series of notes printed on the sheet.

All drawings are to be in black ink without wash or color, except that the walls on the plans and in the sections may be blacked-in or cross-hatched.

Graphic scales are to be shown.

Each drawing is to be signed by a nom de plume, or device, and accompanying same is to be a sealed envelope with the nom de plume on the exterior and containing the true name and address of the contestant.

The drawing is to be delivered flat, or rolled (packaged so as to prevent creasing or crushing) at the office of THE BRICKBUILDER, 85 Water street, Boston, Mass., charges prepaid, on or before January 8, 1912.

Drawings submitted in this competition must be at the owner's risk from the time they are sent until returned, although reasonable care will be exercised in their handling and keeping.

The prize drawings are to become the property of THE BRICKBUILDER, and the right is reserved to publish or exhibit any or all of the others. Those who wish their drawings returned may have them by enclosing in the sealed envelopes containing their names, ten cents in stamps.

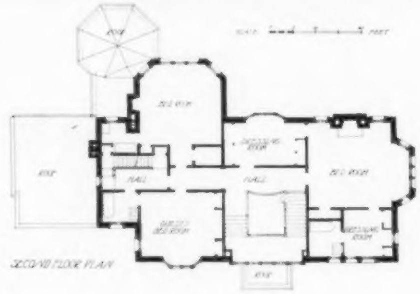
The designs will be judged by three or five well-known members of the architectural profession.

For the design placed first in this competition there will be given a prize of $500.
For the design placed second a prize of $250.
For the design placed third a prize of $150.
For the design placed fourth a prize of $100.

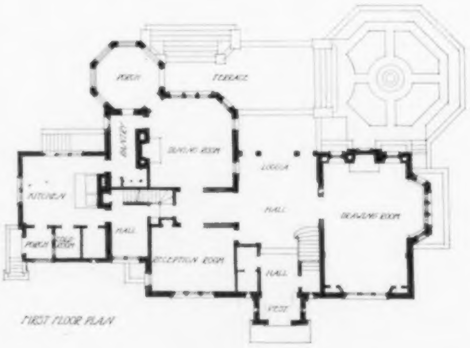
The manufacturers of architectural terra cotta are patrons of this competition.

The competition is open to every one.

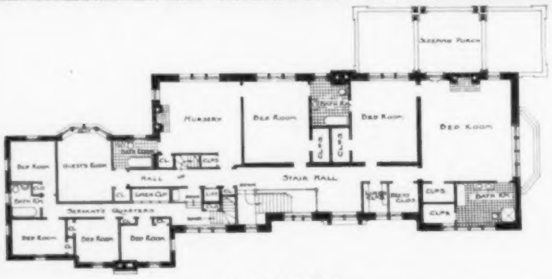
HOUSE AT NEW HAVEN, CONN.
GROSVENOR ATTERBURY, ARCHITECT.



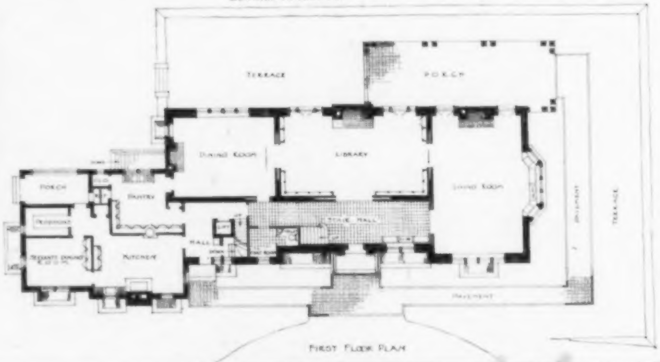
HOUSE AT NEW HAVEN, CONN.
GROSVENOR ATTERBURY, ARCHITECT.



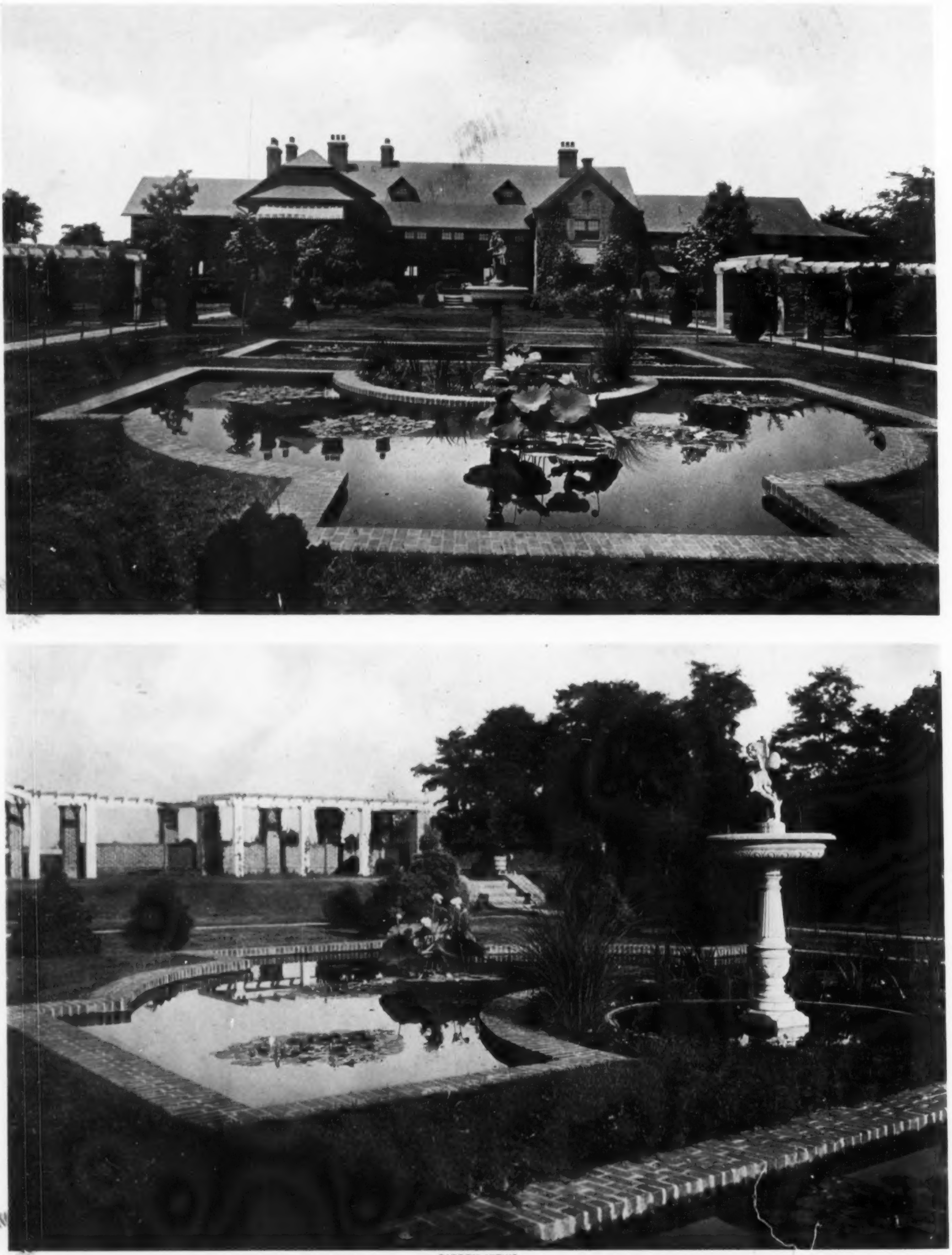
HOUSE AT CHESTNUT HILL, PA.
BROCKIE & HASTINGS, ARCHITECTS.



SECOND FLOOR PLAN



FIRST FLOOR PLAN



GARDEN VIEWS.

HOUSE AT HUNTINGTON, LONG ISLAND, N. Y.

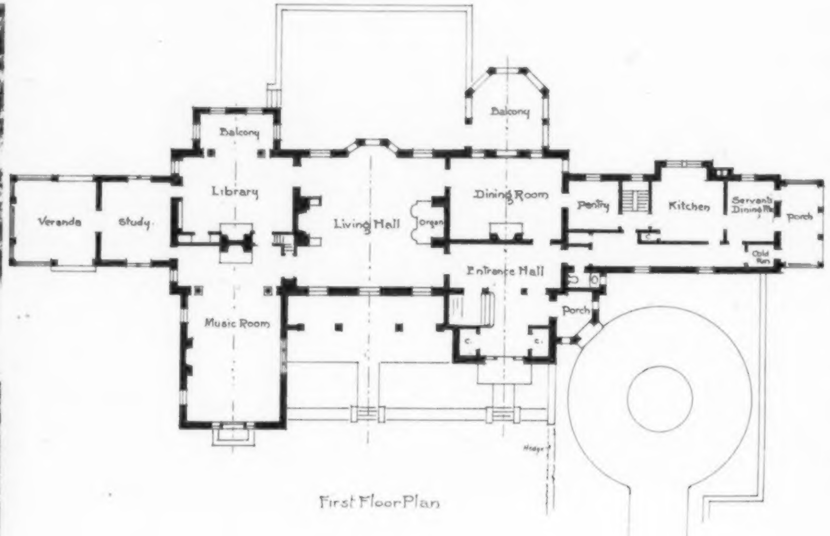
WILSON EYRE, ARCHITECT.

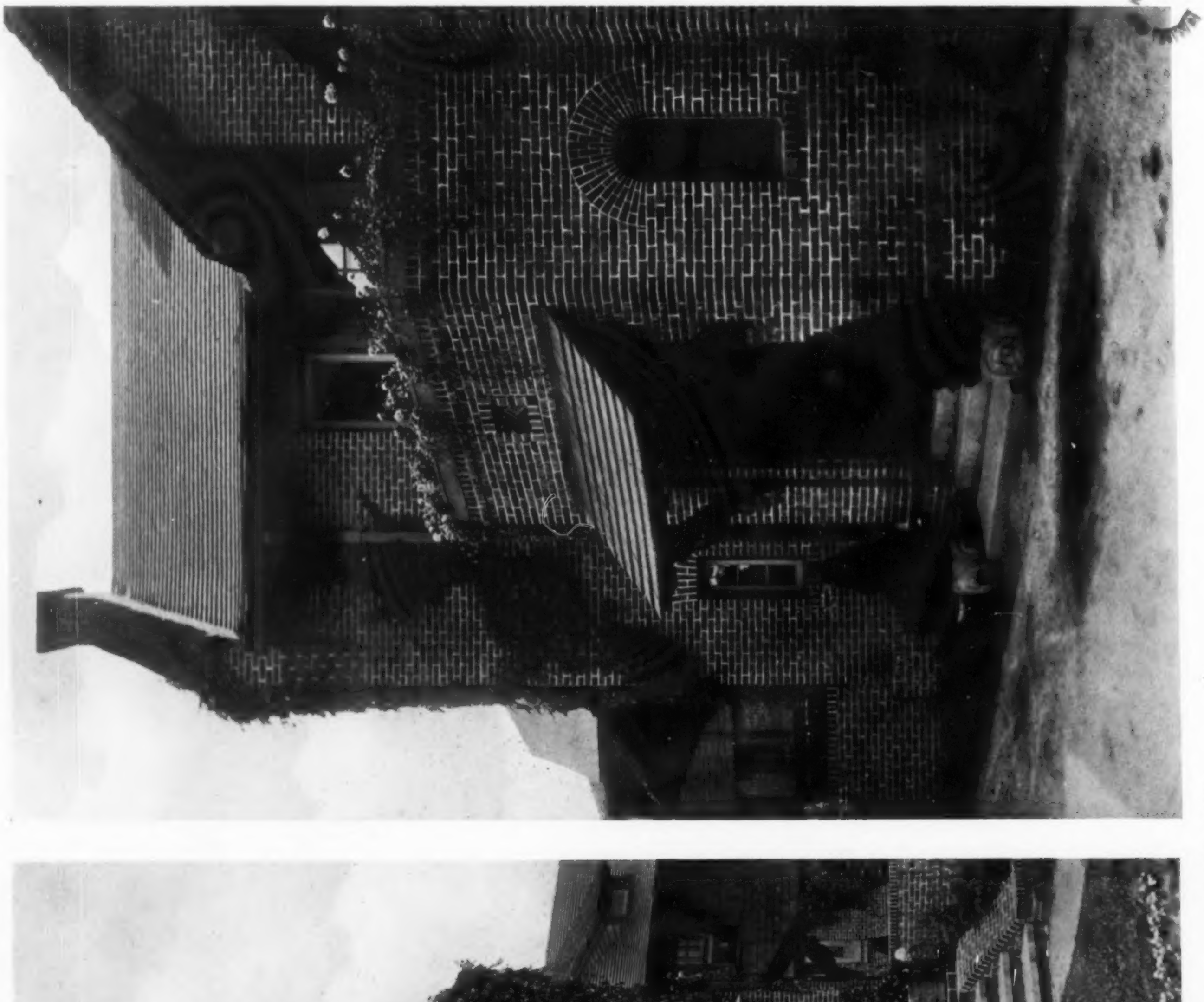
PLANS, INTERIOR AND EXTERIOR VIEWS.

HOUSE AT HUNTINGTON, LONG ISLAND, N.Y.

WILSON EYRE, ARCHITECT.

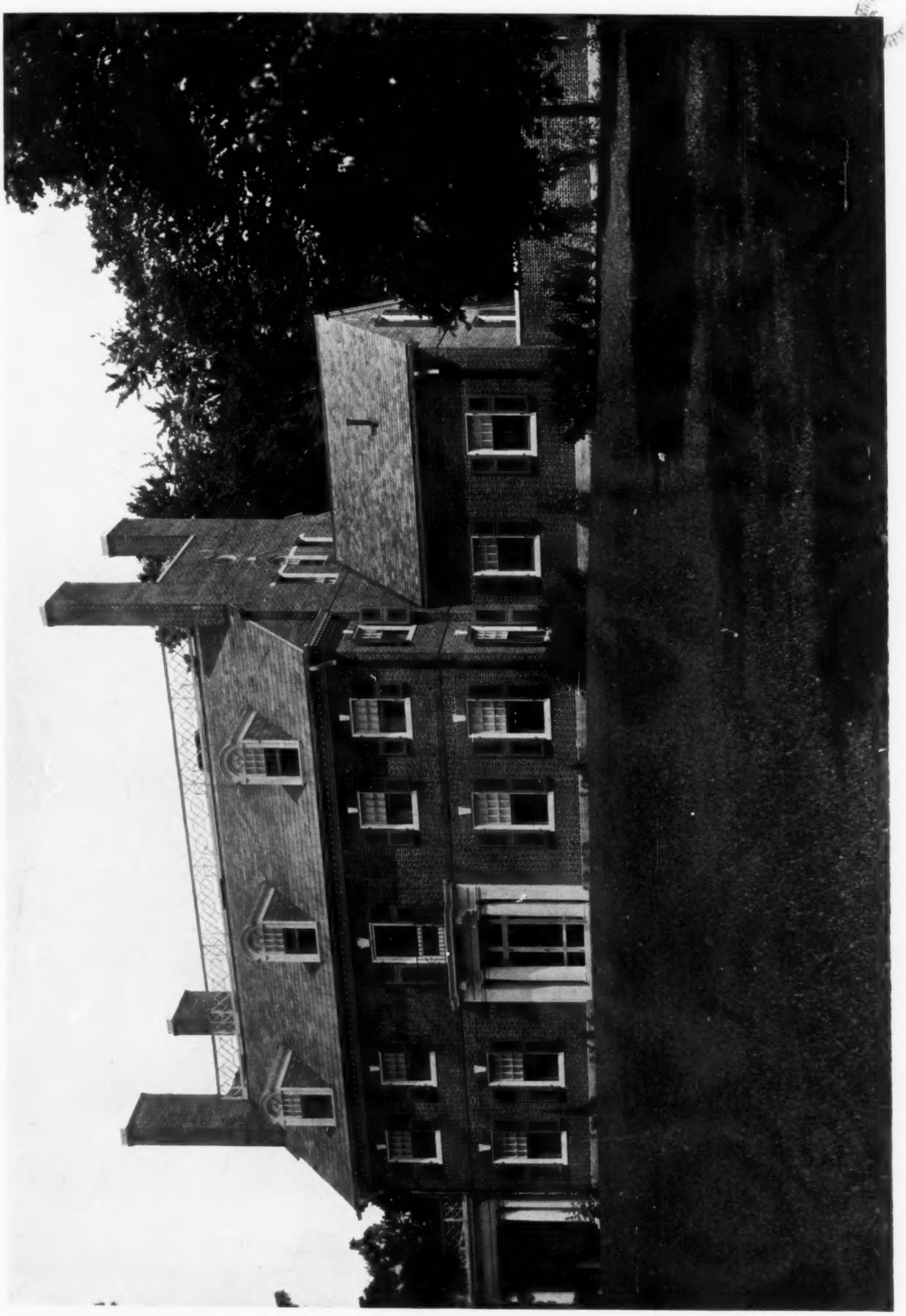
MUSIC ROOM.



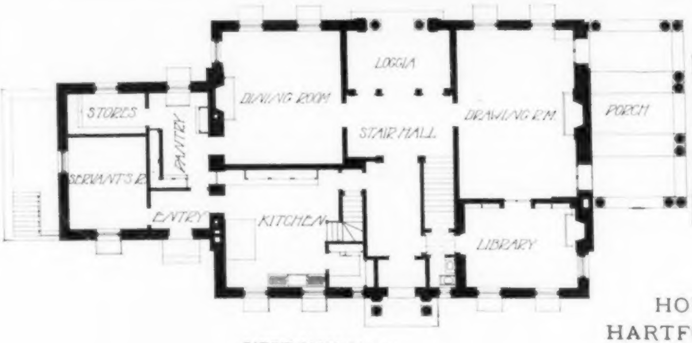


EXTERIOR DETAILS.
HOUSE AT HUNTINGTON, LONG ISLAND, N. Y.
WILSON EYRE, ARCHITECT.

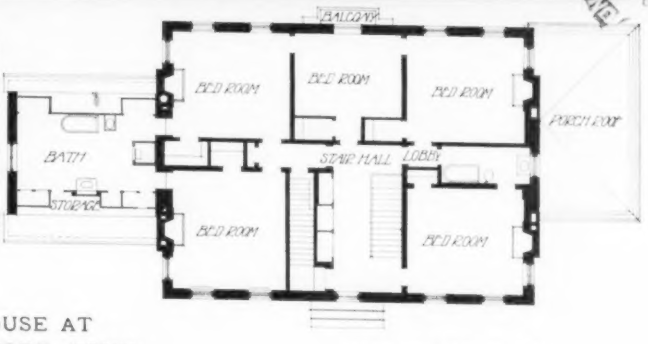
HOUSE AT HUNTINGTON, LONG ISLAND, N Y
WILSON EYRE, ARCHITECT.



HOUSE AT HARTFORD, CONN.
CHARLES A. PLATT, ARCHITECT.

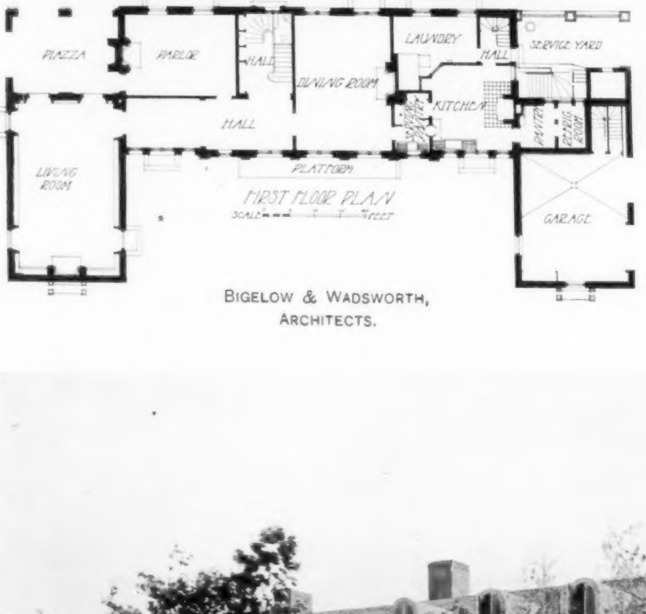


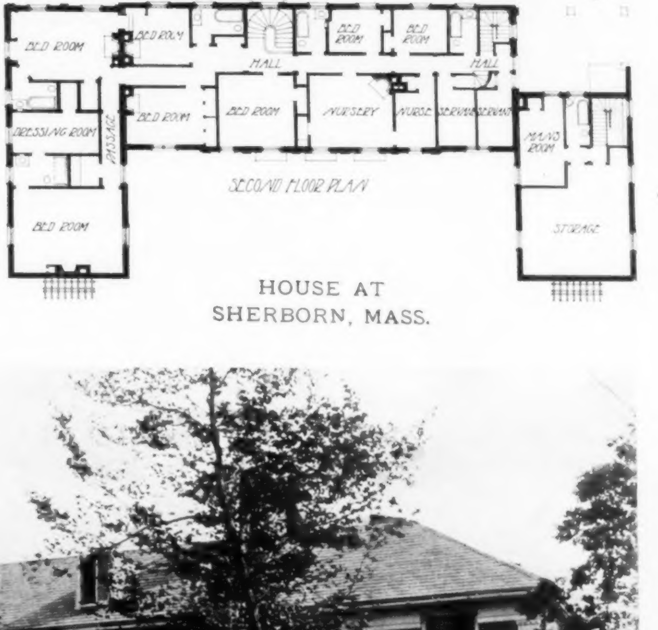
FIRST FLOOR PLAN



SECOND FLOOR PLAN

HOUSE AT
HARTFORD, CONN.
CHARLES A. PLATT, ARCHITECT.





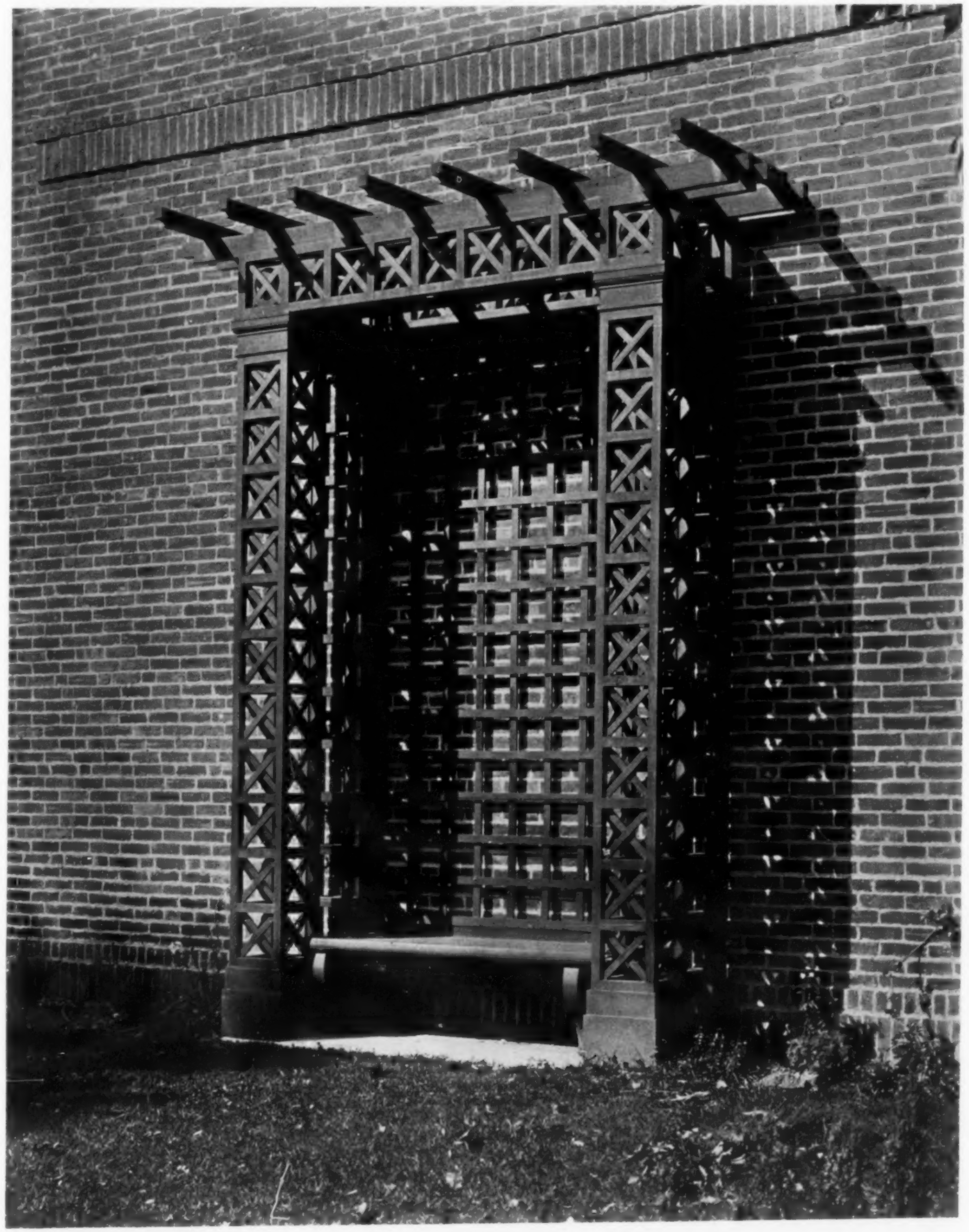
BIGELOW & WADSWORTH,
ARCHITECTS.

HOUSE AT
SHERBORN, MASS.

EXTERIOR AND INTERIOR VIEWS.

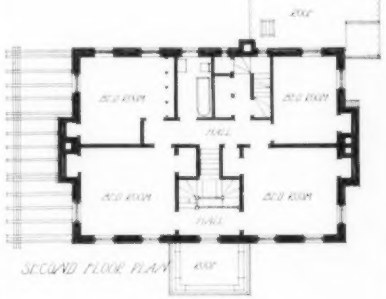
HOUSE AT
SHERBORN, MASSACHUSETTS.

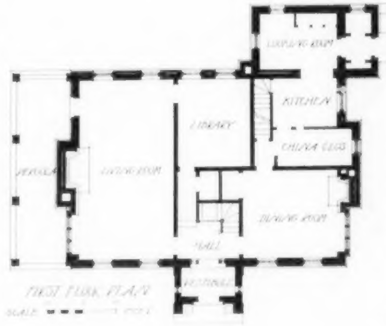
BIGELOW & WADSWORTH, ARCHITECTS.

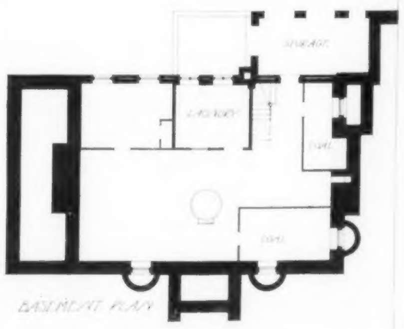


ABRAM GARFIELD,
ARCHITECT.

HOUSE AT CLEVELAND, OHIO.







HOUSE AT BROOKLINE, MASS.
Cummings & Howard, Architects.

HOUSE AT CLEVELAND, OHIO.
J. MILTON DYER, ARCHITECT.